Atty. Docket No. 420229

REMARKS/ARGUMENTS

The amendments and remarks hereto attend to all outstanding issues in the pending office action of 17 June 2005. Claims 1-21 and 23-41 remain pending in this application. Claims 19 and 27-30 are currently withdrawn, as per the Amendment and Response filed 23 November 2004. Claim 22 is canceled herewith.

Amendments to claims 1, 3, 5, 6, 8, 10, 15, 16, 27-29, 31, 37, 38, 40 and 41 replace the terms "wavefront coding [or coded] mask," "wavefront coded structure" and "[optical] phase mask" with "wavefront coding element" for clarity and antecedence. The term "wavefront coding element" is supported in the specification as filed at paragraphs **[00106]** and **[00119]** which describe wavefront coding elements 306A (of FIG. 19) and 704 (of FIG. 24) respectively.

Amendments to claims 1, 15 and 16 move text from the preamble to the claim elements, and are supported by the corresponding claims as filed.

Claim 20 is amended to add limitations originally found in claim 22, with the term "wavefront coding element" substituted for "wavefront coded mask." The amendment to claim 20 is supported by claims 20 and 22 as originally filed.

Claim 23 is amended to depend from claim 20 and for antecedence, due to the amendment to claim 20 and the cancellation of claim 22.

Claim 24 is amended to clarify that modifying phase is done with a wavefront coding element, and for antecedence. The amendment to claim 24 is supported by claim 24 as filed, and in the specification as filed at paragraphs **[0062]**, **[0069]** - **[0076]**, and **[0079]** - **[0082]**.

No new matter is added to the application by any of the claim amendments herein.

Response to Office Action

The following paragraphs follow the order of the paragraphs in the Office Action mailed 17 June 2005 in this application.

1. Response to Amendment

We thank the Examiner for noting entry of the Amendment filed 23 November 2004.

2. Response to Arguments

We appreciate the consideration and indicated persuasiveness of the Amendment filed 23 November 2004. However, we note that the Examiner states that these arguments were "with respect to the rejection of claims 1-18, 20-26 and 31-34, under 102(a)." Office Action, page 2. We believe that the Examiner means that all of the arguments with respect to the rejections of claims 1, 15, 20, 21, 24-26 and 31 under 35 U.S.C. 102(b), and of claims 2-14, 16-18, 22, 23 and 32-34 under 35 U.S.C. 103(a), were persuasive. This note is accordingly provided to clarify the record of the application, and the Examiner is invited to comment if there is any dispute of the clarification provided by Applicants.

3. Claim Rejections - 35 U.S.C. §102

Claims 1-18, 20-26 and 31-41 stand rejected as anticipated under 35 U.S.C. §102(e) as anticipated by U.S. Patent No. 6,525,302 ("Dowski"). Applicants respectfully disagree. To anticipate a claim, the reference must teach every element of the claim and "the identical invention must be shown in as complete detail as is contained in the ... claim." *MPEP 2131* citing *Verdegaal Bros. V. Union Oil Co. of California,* 814 F.2d 628, 2 USPQ2d 1051 (Fed. Cir. 1987) and *Richardson v. Suzuki Motor Co.,* 868 F.2d 1226, 9 USPQ2d 1913 (Fed. Cir. 1989).

Applicants' claim 1, as amended, requires the following elements:

1) optics, including a wavefront coding element, for imaging a wavefront of the imaging system to an intermediate image and for modifying phase of the wavefront such that an optical transfer function of the optical imaging system is substantially invariant to the focus-related aberrations induced, over time, by an intervening medium;

2) a detector for detecting the intermediate image; and

3) a decoder for processing data from the detector to process phase effects induced by the optics to form a final image that is substantially clear of the focus-related aberrations.

Elements (1) and (3) of claim 1 are not found within Dowski. The Examiner states that Dowski discloses: "Optics, including a wavefront coded mask ... for imaging a wavefront of the imaging system to an intermediate image (fig 1, element 418, detected image corresponds to an intermediate image, column 4, lines 49-54) and for modifying phase (column 4, lines 52-54) of the wavefront such that an optical transfer function of the optical imaging system (column 6, lines 21-34, column 10, lines 45-67) is substantially invariant to the focus-related aberrations induced, over time, by the intervening medium (column 9, lines 45-60, column 10, lines 1-67)." Office Action, page 3. Not only is it difficult to follow the Examiner's citations (e.g., element 418 is not in FIG. 1 but is in FIG. 4, and column 4, lines 49-54 do not describe either of FIG. 1 or FIG. 4), but certain of the features alleged by the Examiner to be present are, in fact, not present. For example, the Examiner alleges the feature of focus-related aberrations induced, over time, by the intervening medium as being at column 9, lines 45-60 and/or column 10, lines 1-67. But without reciting these lengthy passages here, the words "intervening medium" (or any "medium") are completely absent here and everywhere else in Dowski. There is no disclosure of element (1) including focus-related aberrations induced, over time, by an intervening medium, in Dowski. In contrast, the concept of focus-related aberrations induced by an intervening medium is described in detail in the present application, for example, in paragraphs **[0002]** and **[0003]**. Moreover, the idea that such aberrations may change "over time," as disclosed in amended claim 1, is disclosed in the present application at, for instance, paragraph **[0005]**, which states "... aberration-induced effects caused by the medium typically change over time." Since Dowski does not disclose these aberrations nor that such aberration-induced effects may change over time, Dowski also does not disclose element (3), a decoder for processing data to form a final image that is clear of these aberrations.

Without, for example, disclosure of elements (1) and (3) of claim 1, Dowski does not show the subject matter of claim 1 "in as complete detail as is contained in the... claim." Applicants therefore request reconsideration and withdrawal of the rejection of claim 1 as anticipated by Dowski under 35 U.S.C. 102(b).

Claims 2-14 depend from claim 1 and benefit from like arguments. Furthermore, these claims include other features that are patentable over Dowski. For

example, claim 3, as amended, requires "the wavefront coding element being configured to account for focus-related aberrations defined by Zernike polynomials." The Examiner states that Dowski discloses "the system of the wavefront coding mask being configured to account for focus-related aberrations defined by Zernike polynomials (column 3, lines 3-22)." Office Action, page 4. However, "Zernike polynomials" are not mentioned in this passage. The only apparent resemblance between the Examiner's citation and the claim 3 requirement appears to be a reference to the pi/2 phase imparted by phase objects as discussed by Zernike. Dowski certainly does not show the subject matter of claim 3 "in as complete detail as is contained in the... claim."

Claim 9 requires "the aberrations comprising one of piston error, quilting error and stuck actuator error." The Examiner states that Dowski discloses "the aberrations comprising one of piston error, quilting error and stuck actuator error (column 12, lines 1-7)." Office Action, page 4. However, Dowski does not teach controlling aberrations comprising piston error, quilting error or stuck actuator error. The passage cited by the Examiner reads: "The Wavefront Coding Phase Contrast system will control the misfocus effects independent of the source of the misfocus. When increasing the depth of field, as shown in FIG. 11, the misfocus effects are produced by the object not being in the best focus position relative to the imaging optics. Misfocus effects can also be produced by non-ideal optics, temperature changes, mechanical positioning errors, and various other sources of optical aberrations. Controlling all of these misfocus effects (and not simply those related to object positioning) allows inexpensive systems to be produced that image with surprisingly high quality." Dowski, column 11, line 66 - column 12, line 10. There is no reference to aberrations comprising piston error, quilting error or stuck actuator error in this passage or anywhere else in Dowski. Dowski certainly does not show the subject matter of claim 3 "in as complete detail as is contained in the... claim."

Claim 10, as amended, requires "the wavefront coding element is positioned at one or more of a principal plane of the imaging system, an image of a principal plane of the imaging system, an aperture stop of the imaging system, and an image of the aperture stop." The Examiner states: "Dowski discloses the system wherein the wavefront coded structure is positioned at one or more of a principal plane of the

imaging system, an image of a principal plane of the imaging system, an aperture stop of the imaging system, and an image of the aperture stop (fig. 4, abstract, column 4, lines 49-54; column 5, lines 9-26, 39-48.)" Office Action, page 5. However, there is no mention at all in Dowski of a principal plane of the imaging system, an image of a principal plane of the imaging system, an aperture stop of the imaging system, or an image of the aperture stop (collectively, the "claim 10 locations"). Furthermore, Dowski certainly does not disclose locating a wavefront coding element at any of the claim 10 locations. Fig. 4 of Dowski does not show any of the claim 10 locations. The Abstract does not disclose any of the claim 10 locations. None of the other passages cited within Dowski disclose any of the claim 10 locations, for example: "Wavefront Coding can be used in conjunction with Phase Contrast imaging techniques to produce systems that have both a large depth of field and high contrast imaging of Phase Objects. The general Phase Contrast imaging system is modified with a special purpose optical element and image processing of the detected image to form the final image." Dowski, column 4, lines 49-54. The lengthy passages at column 5, lines 9-26, 39-48 also do not disclose any of the claim 10 locations or that a wavefront coding element should be located at any such location. In contrast, such location of the wavefront coding element is explicitly taught in the present application at, for instance, paragraph [0067]. Dowski certainly does not show the subject matter of claim 10 "in as complete detail as is contained in the... claim."

Claim 11 requires "the intermediate image defines a modulation transfer function that has no zeros for detected spatial frequencies of the detector." The Examiner states: "Dowski discloses the system wherein the intermediate image defines a modulation transfer function that has no zeros for detected spatial frequencies of the detector (column 7, lines 47-61)." Office Action, page 5. After thorough review and consideration of the cited passage, Applicants find no connection at all between this passage of Dowski and the requirements of claim 11: "Over the normalized aperture (in normalized coordinates extending from -1 to +1) the ideal system has a transmittance of 1, i.e. 100%. The phase variation (not shown) is equal to zero over this range. The corresponding ambiguity function has concentrations of optical power (shown as dark shades) very close to the horizontal v=0 axis. From the relationship between the ambiguity function and misfocused MTFs, we see that the diffraction limited imaging system has a small depth of field

because slight changes in misfocus lead to MTFs (represented by radial lines with non-zero slope in the ambiguity function) that intersect regions of small power (represented by lighter shades of gray or white regions)." Dowski, column 7, lines 47-61. In fact, FIG. 5 of Dowski refers to a system with no phase contrast modification (i.e., no wavefront coding). The use of the phrase "phase variation . . . is equal to zero over this range [in normalized coordinates from -1 to +1]" certainly does not mean that "a modulation transfer function that has no zeros for detected spatial frequencies of the detector" has been disclosed. Nothing in this passage nor FIG. 5 of Dowski discloses "a modulation transfer function that has no zeros for detected spatial frequencies of the detector," therefore Dowski does not show the subject matter of claim 11 "in as complete detail as is contained in the... claim."

Claims 12, 13 and 14 add further limitations to claim 1 and/or claim 11. Again, the Examiner recites the claim limitation along with one or more passages wherein claim elements are allegedly found. We are at a complete loss to find any connection between the passages cited by the Examiner and the required claim elements, and certainly do not find the subject matter of claims 12-14 disclosed "in as complete detail as is contained in the... claim:"

- Claim 12 requires "the decoder operable to restore each detected frequency of the wavefront in the final image." The Examiner states: "As to claims 12, and 32, Dowski discloses the system the decoder [sic] operable to restore each detected frequency of the wavefront in the final image (abstract, note, in fig 4, the coded image which is coming from the detected image then gets decoded in image processing fig 4, 424, the final image is decoded image which result [sic] in an in-focus image)." Office Action, page 5. In Dowski's Figure 4, box 424 labeled "Image Processing" certainly does not disclose a "decoder operable to restore each detected frequency," as required in claim 12 and disclosed in the present application at, for example, paragraphs **[0175]-[0176]**. It is respectfully submitted that the disclosure of an in-focus image is not the same as disclosing that "each detected frequency" is restored.
- Claim 13 requires "the decoder being space variant to control aberrations comprising coma." The Examiner cites: "(abstract, column 12, lines 1-10)."

Office Action, page 5. But the words "coma" and "space variant" are not found in the Abstract, in column 12, lines 1-10 or anywhere else in Dowski.

- Claim 14 requires "the decoder being dynamic to continually produce the final image while the aberrations vary, over time," as discussed in the present application at, for instance, paragraph **[0113]**. The Examiner cites: "column 11, lines 64-67, column 12, lines 1-10)" of Dowski. Office Action, page 5. However, a "decoder being dynamic" and/or aberrations that "vary, over time" are not disclosed in this passage, or anywhere else in Dowski.

For at least all of the reasons cited above, and the fact that claims 2-14 depend from claim 1 (argued above as allowable), Applicants request reconsideration and withdrawal of the rejection of claims 2-14 as anticipated by Dowski under 35 U.S.C. 102(b).

Claim 15, as amended, requires some of the same elements as claim 1, including "optics, including a wavefront coding element, for imaging a wavefront of the imaging system to an intermediate image and for modifying phase of the wavefront such that an optical transfer function of the optical imaging system is substantially invariant to the focus-related aberrations induced, over time, by an intervening medium." The Examiner states: "see the rejection of claim 1." Office Action, page 5. As argued above with respect to claim 1, Dowski does not disclose focus-related aberrations induced, over time, by an intervening medium, and therefore does not show the subject matter of claim 1 "in as complete detail as is contained in the... claim." Applicants therefore request reconsideration and withdrawal of the rejection of claim 15 as anticipated by Dowski under 35 U.S.C. 102(b).

Claim 16, as amended, requires the following step elements:

1) modifying an optical wavefront with a phase function to modify an optical transfer function of an optical system such that the optical transfer function at an intermediate image is substantially invariant to focus-related aberrations induced, over time, by a medium through which the optical wavefront propagates while being imaged by the optical system; and

2) decoding data representative of the intermediate image to remove effects induced by the step of modifying to form a final image that is substantially free of the focus-related aberrations.

Elements (1) and (2) of claim 16 are not found within Dowski. The Examiner states: "see the above rejection of claim 1." Office Action, page 5. As discussed above, Dowski does not disclose focus-related aberrations induced, over time, by a medium through which an optical wavefront propagates while being imaged by the optical system, and therefore does not show step element (1) of claim 16 "in as complete detail as is contained in the... claim." Since Dowski does not disclose such aberrations, Dowski also does not disclose step element (2), decoding data to form a final image that is substantially free of such aberrations. Applicants therefore request reconsideration and withdrawal of the rejection of claim 16 as anticipated by Dowski under 35 U.S.C. 102(b).

Claims 17 and 18 depend from claim 16 and benefit from like arguments; moreover, these claims include additional, patentably distinct limitations. Claim 17 requires "the step of modifying comprises the step of modifying according to Zernike polynomials which characterize the focus-related aberrations." The Examiner cites "(column 3, lines 3-22)." Office Action, page 4. As noted above with respect to claim 3, "Zernike polynomials" are not mentioned in this passage. Claim 18 requires "the medium comprising air, the method being employed within lithography." The Examiner recites the claim element and cites "(column 2, lines 40-67, column 5, lines 1-26)." Office Action, page 5. Even in these lengthy passages, there is no reference at all to "lithography" or "air." Applicants find no connection at all between these passages and the subject matter of claim 18. Dowski certainly does not show the subject matter of claims 17 or 18 "in as complete detail as is contained in the... claim." For all of these reasons, Applicants request reconsideration and withdrawal of the rejection of claims 17 and 18 as anticipated by Dowski under 35 U.S.C. 102(b).

Claim 20, as amended, requires:

1) optics for imaging electromagnetic energy to the detector, the optics comprising a wavefront coding element for modifying phase of a wavefront imaged to the detector;

2) tilt optics having a tilt surface that tilts away from a plane perpendicular to the imaged electromagnetic energy, for reflecting back-scattered radiation to an aperture stop of the imaging system; and

3) a post processor for reducing distortion effects introduced by the reflections.

Elements (2) and (3) of claim 20, at least, are not found in Dowski.

The Examiner states that Dowski discloses "tilt (tilt corresponds to surface slope, column 3, lines 46-52) optics having a tilt surface that tilts away from a plane perpendicular to the imaged electromagnetic energy, for reflecting back-scattered radiation to an aperture stop of the imaging system (column 12, lines 36-55)." Office Action, page 6. The first of these passages erroneously construes a passage that contains the words "surface slope," while the second passage is completely unrelated to the elements of claim 20. In the first passage, Dowski discusses "surface slope" of a Phase Object: "where δ is the phase delay due to the Phase Object. The value of this phase delay is dependent on the size of the Phase Object, the local surface slope, and the change in index of refraction. It is this phase delay due to the Phase Object that is transferred to image intensity with Phase Contrast Imaging. With the identity sin(a-b)=sin(a)cos(b)-cos(a)sin(b), S_1 can be written as: ..." Dowski, column 3, lines 46-52. This passage describes the effect of surface slope of a Phase Object, not optics, and therefore does not disclose tilt optics. Respectfully, we are at a loss as to why the Examiner cites column 12, lines 36-55. There is no connection at all between this passage, or anything in Dowski, and "reflecting back-scattered radiation" or an "aperture stop of the imaging system."

Element (3) of claim 22 requires "a post processor for further reducing distortion effects introduced by the reflections." With respect to this requirement (previously contained in claim 22) the Examiner cites "(abstract, column 6, lines 21-34)." Office Action, page 6. But this passage, and all of Dowski, does not include disclosure of "reducing distortion effects introduced by the reflections," and certainly not "in as much detail as is contained in the... claim."

Since elements (2) and (3), at least, of claim 20 are not found in Dowski, Applicants request reconsideration and withdrawal of the rejection of claim 20 as anticipated by Dowski under 35 U.S.C. 102(b).

Claims 21 and 23 depend from claim 20 and benefit from like arguments. Furthermore, claim 21 requires "the tilt optics being positioned at the aperture stop." The Examiner repeats this limitation of claim 21 and adds "column 12, lines 36-55." As discussed above with respect to claim 20, there is simply no disclosure in this passage, or anywhere else in Dowski, of "tilt optics being positioned at an aperture stop." For at least all of the reasons cited above, Applicants request reconsideration and withdrawal of the rejection of claims 21 and 23 as anticipated by Dowski under 35 U.S.C. 102(b).

Claim 24, as amended, requires:

1) modifying phase of a wavefront of the optical system with a wavefront coding element; and

2) post-processing image data of the optical system to remove phase effects induced by the wavefront coding element, to control one or more of quilting, stuck actuator and piston error.

At least element (2) of claim 24 is not found in Dowski. The Examiner cites "(column 4, lines 40-48, column 5, lines 9-26, 39-48)." Office Action, page 7. It is noted that the Examiner cites different passages of Dowski with respect to claim 24 than with respect to claim 9, and appears to allege that both sets of passages disclose piston error, quilting error and/or stuck actuator error. However, none of the cited passages includes any such disclosure. Since element (2) of claim 24 is not found in Dowski, Applicants request reconsideration and withdrawal of the rejection of claim 20 as anticipated by Dowski under 35 U.S.C. 102(b). Claim 25 depends from claim 24 and benefits from like arguments; Applicants also request the reconsideration and withdrawal of its rejection.

After thorough review and consideration of the current Office Action, Applicants find no statements or arguments that support the rejection of claim 26. Absent a showing of prior art anticipating claim 26, Applicants respectfully request its allowance.

Claim 31, as amended, requires:

1) optics, including a wavefront coding element, for imaging a wavefront of an object to be recognized to an intermediate image; and

2) a detector for detecting the intermediate image, wherein a modulation transfer function detected by the detector contains no zeros such that subsequent task based image processing recognizes the object.

At least element (2) of claim 31 is not found in Dowski. The Examiner states that Dowski discloses "a detector for detecting the intermediate image, wherein a modulation transfer function (column 6, lines 9-21) detected by the detector contains no zeros (column 7, lines 47-60) such that subsequent task based image processing recognizes the object (column 12, lines 1-10)." Office Action, page 7. But Dowski does not disclose that "a modulation transfer function detected by the detector contains no zeros," as discussed above with respect to claim 11. Furthermore, Dowski does not disclose that "task based image processing recognizes the object," in the passage cited by the Examiner or anywhere else. Since element (2) of claim 31 is not found in Dowski, Applicants request reconsideration and withdrawal of the rejection of claim 31 as anticipated by Dowski under 35 U.S.C. 102(b).

Claims 32-34 depend directly or indirectly from claim 31 and benefit from like arguments, however, these claims include additional, patentably distinct limitations.

Claim 32 requires "a decoder, connected with the detector, for implementing the task based image processing." The Examiner appears to reject claim 32 over the same passage and figure of Dowski as claim 12: "As to claims 12 and 32, Dowski discloses..." Office Action, page 5, as cited above with respect to claim 12. However, the Examiner does not show how "a decoder" is disclosed as "for implementing task based image processing." Neither the passage and figure of Dowski cited in connection with claim 12, nor any other passage of Dowski, disclose "a decoder, connected with the detector, for implementing the task based image processing," and certainly not "in as much detail as is contained in the... claim."

Claims 33-34 depend from claim 32 and benefit from like arguments. Claim 33 also requires "the decoder operable as an all-pass filter in the frequency domain."

Claim 34 requires "decoder operable as an attenuation filter in the frequency domain for magnifications of one or less." The Examiner states: "Dowski discloses the system of the decoder operable as an all-pass filter (column 11, lines 16-29) in the frequency domain (column 3, lines 23-65, column 10, lines 20-30, column 11, lines 1-15)." Office Action, page 7. The Examiner makes a similar recitation of the claim elements and cites the same passages of Dowski with respect to claim 34. But these passages do not disclose "an all-pass filter," let alone a "decoder operable as an all-pass filter in the frequency domain," and do not disclose "an attenuation filter in the frequency domain for magnifications of one or less." Column 11, lines 16-29 do not disclose an "all-pass filter," an "attenuation filter" or anything to do with "the frequency domain." Column 3, lines 23-65 is the beginning of "A mathematical description of Phase Contrast imaging..." Dowski, column 3, line 23. This passage does not disclose an "all-pass filter," an "attenuation filter" or anything to do with "the frequency domain." Likewise, column 10, lines 20-30 does not disclose an "all-pass filter," an "attenuation filter" or anything to do with "the frequency domain." Column 11, lines 1-15 also does not disclose a "decoder operable as an all-pass filter in the frequency domain" or "an attenuation filter in the frequency domain for magnifications of one or less."

For all of the reasons listed, Applicants request the reconsideration and withdrawal of the rejection of claims 32-34 as anticipated by Dowski under 35 U.S.C. 102(b).

The Examiner includes an argument directed to claim 35 in statements regarding the rejection of claim 20. However, in addition to the elements of claim 20 that are argued above as not present in Dowski, we note that the Examiner includes no mention of the claim 35 element of "a post processor for processing data from the detector to remove aberrations induced by the tilt optics." Neither the "tilt optics" nor the "post processor ... to remove aberrations induced by the tilt optics" of claim 35 is disclosed in Dowski, and certainly not "in as much detail as is contained in the... claim." Applicants accordingly request reconsideration and withdrawal of the rejection of claim 35 as anticipated by Dowski under 35 U.S.C. 102(b).

Claims 36-38 depend directly or indirectly from claim 35 and benefit from like arguments; furthermore, certain of these claims include additional, patentably

distinct limitations. For example, claim 36 requires "the tilt optics being positioned at an aperture stop." As argued above with respect to claim 21, Dowski does not disclose an aperture stop; Dowski certainly does not disclose "tilt optics being positioned at an aperture stop." For at least all of the reasons listed above, Applicants request reconsideration and withdrawal of the rejection of claims 36-38 as anticipated by Dowski under 35 U.S.C. 102(b).

Claim 39 requires:

1) optics for imaging electromagnetic radiation to a detector, the detector being tilted with respect to an optical axis of the optics to direct back-scattered electromagnetic radiation from the detector to an aperture stop of the imaging system; and

2) a post processor for processing data from the detector to remove aberrations induced by the tilt of the detector.

Dowski does not disclose either of elements (1) and (2) of claim 39. The Examiner includes a rejection of claim 39 in statements regarding the rejection of claims 20 and 35. In addition to the elements of claims 20 and 35 that are argued above as not present in Dowski, we note that the Examiner includes no mention of the claim 39 element of "a detector being tilted with respect to an optical axis of the optics to direct back-scattered electromagnetic radiation from the detector to an aperture stop of the imaging system." Furthermore, there is no disclosure of "a post processor for processing data from the detector to remove aberrations induced by the tilt of the detector." We contend that, at least, neither the "detector being tilted" nor the "aberrations induced by the tilt of the detector" of claim 35 is disclosed in Dowski. Claims 40 and 41 depend directly or indirectly from claim 39 and benefit from like arguments. Applicants accordingly request reconsideration and withdrawal of the rejection of claims 39-41 as anticipated by Dowski under 35 U.S.C. 102(b).

Conclusion

In view of the above Amendments and Remarks, Applicants have addressed all issues raised in the Office Action dated 17 June 2005, and respectfully solicit a Notice of Allowance. Should any issues remain, the Examiner is encouraged to telephone the undersigned attorney.

Atty. Docket No. 420229

The $120 fee for a one-month extension of time is enclosed. Applicants believe no other fees are currently due, however, if any fee is deemed necessary in connection with this Amendment and Response, please charge Deposit Account No. 12-0600.

Respectfully submitted,

LATHROP & GAGE L.C.

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